Title (en)

Automotive engine idle speed control device

Title (de)

Leerlaufdrehzahlregelvorrichtung für Kraftfahrzeugmotor

Title (fr)

Dispositif de commande de la vitesse de ralenti pour moteur de véhicule

Publication

EP 1574707 B1 20070110 (EN)

Application

EP 05002283 A 20050203

Priority

- JP 2004043141 A 20040219
- JP 2004056137 A 20040301

Abstract (en)

[origin: EP1574707A1] An engine idle speed control device set a target idle speed NsetN for a non-traveling range is set to a high value to activate the catalytic converter early, after the engine is started. Upon detecting that the automatic transmission has been shifted from a non-traveling range to a traveling range, the target idle speed is lowered to a first traveling idle speed Nset1 for a prescribed period (200 ms). After the prescribed period elapses, the target idle speed is lowered even further to a second traveling target idle speed Nset2. When the target idle speed is set to the first traveling target idle speed Nset1, the ignition timing retardation amount RET is set in accordance with the actual engine rotational speed Ne in such a fashion that the higher the engine rotational speed Ne is, the more the ignition timing ADV is retarded. <IMAGE>

IPC 8 full level

F02P 5/15 (2006.01); F02D 41/02 (2006.01)

CPC (source: EP US)

F02D 41/023 (2013.01 - EP US); **F02D 41/0255** (2013.01 - EP US); **F02D 41/08** (2013.01 - EP US); **F02D 41/083** (2013.01 - EP US); **F02P 5/1504** (2013.01 - EP US); **F02P 5/1506** (2013.01 - EP US); **F02P 5/1508** (2013.01 - EP US); B60W 2710/0644 (2013.01 - EP US); B60W 2710/065 (2013.01 - EP US); F02D 41/022 (2013.01 - EP US); F16H 2061/0488 (2013.01 - EP US); Y02T 10/12 (2013.01 - EP US); Y02T 10/40 (2013.01 - EP US)

Cited by

EP2937240A3; GB2498553A; GB2498553B; CN110192017A; EP3575582A4; US11840973B2; FR3101667A1; US9561798B2

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